

Case Report

SGLT-2 Inhibitor- Dapagliflozin Induced Dizziness -A Case Report

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Abbreviations:

T2DM, Type 2 Diabetes Mellitus

SGLT-2, Sodium-Glucose Cotransporter-2

RBS, Random Blood Sugar

ABSTRACT:

Herein the author presents a case report of a 45 years old obese male with type II diabetes mellitus was started on Dapagliflozin and next week the patient presented with complaints of polyuria and dizziness. Here in this case report the author discusses the SGLT-2 inhibitor induced dizziness and its treatment.

Keywords:

Diabetes Mellitus

SGLT-2 inhibitors

Dapagliflozin

Dizziness

Hypotension

INTRODUCTION

Selective sodium-dependent glucose cotransporter 2 (SGLT-2) inhibitors are Aryl glycosides that are non-secretagogues [1]. They are functional against diabetes by causing glucosuria. Embodiments of SGLT-2 inhibitors like Dapagliflozin, Canagliflozin, etc., cause adverse effects like polyuria, urinary tract infections, dizziness, diabetic ketoacidosis, orthostatic hypotension, etc. [2]

Case Presentation

A 45 years old obese male with type II Diabetes Mellitus was started on Dapagliflozin 10 mg per day along with the medication he was

previously taking. The next week he presented with complaints of polyuria and dizziness.

EXAMINATION FINDINGS:

The patient had RBS -143mg/dl. Hence no hypoglycemia; BP- 96/70 mmHg, 10mm Hg of systolic BP lesser than he had in his previous visit; Orthostatic hypotension was present; Heart rate - 82beats/min. No Tachycardia; HbA1C levels >8.

TREATMENT:

Instead of withholding Dapagliflozin, dose was reduced to 5 mg per day. Also, the patient was advised to maintain adequate hydration. In the next visit the patient had comparatively decreased polyuria and dizziness. Causality assessment done and Naranjo score is 8.

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DISCUSSION

Plasma volume reduction has been ascribed to the drug's diuretic and mild natriuretic effects, due to the inhibition of sodium reabsorption in the proximal tubules and osmotic diuresis [3]. Plasma volume reduction has been ascribed to the drug's diuretic and mild natriuretic effects, due to the inhibition of sodium reabsorption in the proximal tubules and osmotic diuresis [3].

CONCLUSION

Since Dapagliflozin is known to cause hypotension, and dizziness in some patients, it is to be used with caution in patients who frequently have hypotensive episodes, orthostatic hypotension and in patients taking diuretics [3]. Patients should be advised to maintain adequate hydration except in cases requiring fluid restriction, to avoid consequences due to Hypotension.

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Madhan L: Writing, Editing.

Nithya Priya M: Writing and Review

Declaration of Competing Interest

None

Ethical Statement

This article does not contain any studies with human participant or animal performed by any of the author

Informed consent

Obtained.

Peer-Review

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1. Dr. Shanmugam A, HOD, Department of Diabetology, Government Kilpauk Medical College, Chennai.
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Supplementary material

None

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